Search History

Database Details

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S1	"ENERGY RATIO"	190	Display
S2	"STANDARD DEVIATION"	19835	Display
S3	S1 AND S2	0	Display
S4	UNSHARP	1790	Display
S5	(MASK OR MASKING)	172828	Display
S6	S4 AND S5	747	Display
S7	S1 AND S6	0	Display
S8	S2 AND S6	2	Display

Format
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Number of Records
10

Show Database Details for:
2: Inspec (1898-present)

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Electrical Engineering

To search the database index, select two or more databases and enter your search terms

Search

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- ☑ 2:Inspec (1898-present)
- ☑ 6:NTIS - National Technical Information Service
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- ☑ 25:Weldasearch
- ☑ 34:SciSearch® - a Cited Reference Science Database - 1990-
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- ☑ 46:Corrosion Abstracts
- ☑ 56:Computer and Information Systems
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- ☑ 95:TEME - Technology and Management
- ☑ 99:Wilson Applied Science & Technology Abstracts
- ☑ 103:Energy Science and Technology
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- ☑ 108:CSA Aerospace & High Technology Database
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- ☑ 647:CMP Computer Fulltext

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8/9/1 (Item 1 from file: 2)
09791063
Title: Multi-feature seafloor sediments classification for side-scan sonar imagery based on a quadratic unsharp masking operator
Author Yang Ci-yin; Xu Feng
Author Affiliation: Lab. of Imagery Sonar Tech., Chinese Acad. of Sci., Beijing, China
Journal: Acta Electronica Sinica vol.33, no.10 p. 1841-4
Publisher: Chinese Inst. Electron ,
Publication Date: Oct. 2005 **Country of Publication:** China
CODEN: TTHPAG **ISSN:** 0372-2112
SICI: 0372-2112(200510)33:10L.1841:MFSS;1-2
Material Identity Number: B902-2005-013

Language: Chinese **Document Type:** Journal Paper (JP)
Treatment: Practical (P); Theoretical (T)
Abstract: A quadratic unsharp masking (QUM) operator is presented, which extracts edge and detail information from an image with equal weights. QUM which is the mean of QUM values for all pixels in an image, TEM which is the mean of TEM (Laws' texture energy measure) values for all pixels in the image, and standard deviation (sigma) of the image are combined to form a three-dimensional feature vector (QUM, TEM, sigma), for performing classification on side-scan sonar seafloor images. 150 sidescan sonar images for mud, sand and rock seafloors are classified using the presented three-dimensional feature vector, and recognition rates of maximum 96.7% and minimum 90.7% are achieved. These same 150 seafloor images are also classified using the conventional gray level co-occurrence matrix features, and a recognition rate of 87.3% is achieved, which shows that the presented seafloor classification method has better classification performance. (12 Refs)
Subfile: A B C
Descriptors: feature extraction; geophysical signal processing; image classification; image recognition; image segmentation; image texture; matrix algebra; oceanographic techniques; sediments; sonar imaging
Identifiers: seafloor sediment classification; side-scan sonar imagery; quadratic unsharp masking; QUM operator; edge extraction; texture energy measure; TEM ; standard deviation; three-dimensional feature vector; seafloor image; cooccurence matrix feature; recognition rate
Class Codes: A9150J (Marine sedimentation and sediments); A9365 (Data and information; acquisition, processing, storage and dissemination in geophysics); B7710D (Oceanographic and hydrological techniques and equipment); B6135E (Image recognition); B0210 (Algebra); B6320E (Sonar and acoustic radar); C7340 (Geophysics computing); C5260B (Computer vision and image processing techniques); C1250M (Image recognition); C1110 (Algebra)

8/9/2 (Item 1 from file: 56)
0000525767 IP Accession No: 200609-34-056981
Use of blur-space for deblurring and edge-preserving noise smoothing

Immerkaer, J
IEEE Transactions on Image Processing , v 10 , n 6 , p 837-840 , June 2001

Publication Date: 2001
Publisher: Institute of Electrical and Electronics Engineers, Inc. , 445 Hoes Ln , Piscataway , NJ , 08854-1331
Country Of Publication: USA
Publisher Url: http://ieee.org
Publisher Email: inspec@ieee.org

Document Type: Journal Article
Record Type: Abstract
Language: English
ISSN: 1057-7149
Electronic Issn: NO
DOI: 10.1109/83.923280
File Segment: Computer & Information Systems Abstracts

Abstract:
The Gaussian blur-space for an unblurred nD-image I is the set of the images obtained by blurring I with multivariate nD-Gaussians. Using the variance, instead of the standard deviation, of a Gaussian as blur parameter makes it simpler to extrapolate a deblurred image from a blurred image. Unsharp masking is shown to be a special case of the use of blur-space. Algorithms using blur-space for deblurring and edge-preserving noise smoothing, without explicit edge detection, are described and implemented

Descriptors: Images; Neodymium; Gaussian; Image processing; Masking; Blurring; Variance; Smoothing; Edge detection; Noise; Standard deviation; Algorithms; Blurred; Extrapolation
Subj Catg: 34, Multimedia Information Systems

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	5	((TZU-HUNG) near2 (CHENG)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/22 12:19
S2	1	((TZU-HUNG) near2 (CHENG)).INV.	EPO; JPO; DERWENT	OR	ON	2007/02/22 13:20
S6	1212	unsharp near2 mask$5	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/02/22 13:21
S7	175	S6.ab.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/02/22 13:28
S8	121	S7 and "unsharp mask"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/02/22 13:29
S9	175	S6 and S7	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/02/22 13:30
S10	8	deviation and S9	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/02/22 13:31
S11	8	deviation and S7	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/02/22 13:34
S18	66	S6 and 382/132.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/02/22 13:56

EAST Search History

S31	2182	energy adj ratio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/15 13:28
S32	41	S31 and "382".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/15 13:30
S33	190	S31 same filter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/15 13:30
S34	5	S33 and "382".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/15 13:32
S35	128940	bandpass or (band adj pass)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/15 13:33
S36	20	S31 same S35	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/15 13:38
S37	1194	unsharp adj mask$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/15 13:38
S38	467	S37 and "382".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/15 13:42

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S40	39	S38 and S35	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/29 09:46
S41	2141	(382/260,263,264,266).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/03/29 09:47
S42	1220	unsharp near2 mask$5	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/29 09:47
S43	196	S41 and S42	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/29 09:50
S44	360526	lumin$6	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/29 09:50
S48	129276	bandpass or (band adj pass)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/29 10:15
S49	129276	S48	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/29 10:15
S50	46	S49 and S44 and S42	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/29 10:19
S51	230126	brightness	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/29 10:19

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S52	97	S51 same S42	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/29 10:19
S53	11	S52 and S41	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/29 10:19
S54	85524	standard adj deviation	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/29 12:51
S55	149	S48 same S54	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/29 12:51
S56	3	S42 and S55	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/29 12:54
S57	27	S42 same S54	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/29 12:54